<u>REMARKS</u>

Claims 1-41 are currently pending in the subject application and are presently under consideration. Claims 40-41 have been amended as shown on p. 8 of the Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I.   December 14, 2007 Telephonic Interview with Examiner

Initially, the undersigned wishes to thank the Examiner for discussing the outstanding issues in connection with the subject patent application via the telephonic interview held Dec. 14, 2007. While no agreement was reached in the interview, Applicants are grateful for the Examiner's willingness to conduct such interviews in furtherance of expedited prosecution.

II.   Summary of the Invention

With the invention, a request for a hierarchical data stream, such as a request for an XML stream, specifies a mode from a set of different modes for organizing the information returned in the XML stream. For instance, in a first mode, primary-foreign key information is utilized when generating the data stream to organize the data stream. In another mode, the order of the tables in the query defines the organization of the data stream. In yet another mode, an explicit definition of the organization of the stream is contained in the query, including nesting information. In this regard, depending upon which mode of a set of modes is designated in the query, the resulting data stream is organized differently.

It is conceded that no prior art reference of record alone teaches or suggests all of limitations of claims 1-39, each reciting novel and unobvious aspects of the invention, however, claims 1-39 stand rejected for obviousness. However, as discussed below, Applicants respectfully submit that one of ordinary skill in the art would have been actively led away from making the combination of record based on a full consideration of their respective disclosures.

III.   Rejection of Claims 1-39 Under 35 U.S.C. §103(a)

Claims 1-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cheng, et al. (US 6,366,934) in view of Richard, et al. (US 6,484,160). However, Applicants respectfully submit that the disclosures of Cheng, et al. and Richard, et al. would lead one of ordinary skill in

the art away from making such a combination because they disclose disparate and non-interoperable technologies in each of the references, and include express statements that teach away from making such a combination under 35 U.S.C. § 103.

In this regard, both Cheng, et al. and Richard, et al. each disclose different complicated systems predicated on very different and non-interoperable standards, protocols and technologies. As with any complicated system, the objects, structures and methodologies of such systems are inextricably linked to one another within their respective systems, and are inseparable from their implementations as a result. In this regard, Applicants respectfully submit that Richard, et al. and Cheng, et al. are not properly combinable at least because the two systems implement non-analogous and non-interoperable standards, protocols, technologies and because the Cheng reference teaches away from the use of B-tree technology being relied upon in Richards, et al.

In this respect, Applicants respectfully submit that the mere fact that Richard, et al. and Cheng, et al. are both in the "database" field cannot be said to outweigh the very disparate and non-interoperable technologies implemented by each and the express statements made in the references themselves counseling against making such a combination. As described in more detail below, one of ordinary skill in the art would thus be led away from combining these two references.

The Disclosure of Richard, et al.

Starting with the system disclosed by Richard, et al., it relates to Index Sequential Access Method (ISAM) technology, which describes the structures of records, and is a method for accessing files structured in the form of records divided into one or more indexes and data. Col. 4, lines 3-5

The problem identified by Richard, et al. is that a generic condition for storing objects imposed by the old version of CMIS-DB (i.e., a local object manager for the Common Management Information Service, ITU-T Recommendation T X.710) is to physically read all the selected objects belonging to the scope before evaluating the filter in storage. When there are a lot of objects subordinate to an object, performance can be quite poor. Col. 4, lines 32-37

In this regard, in summarizing the system, Richard, et al. states the basic concept … is to use an indexing mechanism that is found in indexed files of the ISAM type or in relational or

object-oriented databases **so as to be able to index certain object attributes**. Col. 6, lines 35-39

More specifically, the passage relied upon in the Official Action states that the system of Richard, et al. makes "it possible to perform complex operations on a very large number of objects **while reducing the search times for the instances selected by the scope and filter arguments of CMIS operations**" (Col. 5, lines 1-5).

The Disclosure of Cheng, et al.

The Official Action concludes that it would have been obvious to modify Cheng, et al. by the disclosure of Richard, et al. "to include designating a mode from a plurality of modes with the motivation to **optimizing accesses to a database** organized into trees as taught by Richard et al."

However, in clear contrast, while Cheng, et al. may relate generally to relational database technology, Cheng, et al. does not focus on "optimizing accesses to a database" at all. Rather, Cheng, et al. expressly disavows the approaches proposed by Richard, et al. stating that

> "**an alternative has been proposed to implement the B+ tree index structures inside the text search engine and then to perform the search. However, this approach is very expensive to implement.** Another approach involves the creation of actual tables having columns storing attributes of XML documents. An index can be created on the columns and this index could support searches. **This approach wastes space and cannot efficiently maintain the extra table.**" Cheng, et al., Col. 3, lines 9-18

Accordingly, Cheng, et al. and Richard, et al. provide different complex computing systems that are predicated on disparate technologies, and explicitly teach away from such a combination within the four corners of the documents.

Moreover, by any stretch, "scope and filter arguments of CMIS operations" disclosed by Richard, et al. are not conceded herein to be the same as "designating a mode from a plurality of modes," as claimed by Applicants in various embodiments. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-39 under 35 U.S.C. § 103 for at least the above reasons.

In short, while Cheng, et al. and Richard, et al. each are about database technology, this alone does not end the inquiry of whether one of ordinary skill in the art would be led to combine the references, or whether doing so consists of hindsight reconstruction of Applicants' invention. In this case, explicit teachings within the references themselves counsel against combining the

references, and Applicants respectfully submit that one of ordinary skill in the art would not be led to combine Cheng, et al. and Richards, et al. for having highly disparate implementations.

IV.   Rejection of Claims 40-41 Under 35 U.S.C. § 102(e)

Claims 40-41 also stand rejected under 35 U.S.C. § 102(e) as being unpatentable over Cheng, et al. Applicants have previously noted Cheng, et al. includes no disclosure of a universal table, a term of art. In this respect, a universal table is explained in Applicants' specification at least at paragraph [0052] as follows:

> In the "explicit" 307 mode example embodiment, a query is constructed to generate a universal table. **A universal table includes metadata columns for element tags and metadata columns for parent tags. A universal table also encodes the XML generic identifiers and attribute names in the table column names.** Once the element tags and the parent tags are added to a universal table, the universal table fully describes an XML data stream. The present invention is not limited to use with a particular universal table format...

Without conceding the propriety of the rejection, claim 40 and 41 have been amended herein consistent the definition of a universal table from the specification as set forth at least at paragraph [0055] of the specification.

In sum, with respect to claim 40, Applicants respectfully submit that the mere identification of a table in Cheng, et al. does not teach or fairly suggest a "universal table" as claimed as including "metadata column information". In this regard, embodiments of the invention predicated on a query including information for generating a universal table are described at least at paragraphs **[0052]** to **[0055]** of Applicants' specification. Accordingly, at least for this reason, Cheng et al. cannot be said to teach or fairly suggest "receiving the query, the query including information including metadata column information for generating a universal table that includes the metadata column information," as recited in claim 40.

Reconsideration and withdrawal of the outstanding rejection under 35 U.S.C. § 102(e) is thus respectfully requested in view of the amendment herein.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP1470USB].

Should the Examiner believe an additional telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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